PIANC Bulletin

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Permanent International Association of Navigation Congresses (PIANC)

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President's Message *by Major General Don T. Riley, President, PIANC USA, and Director of Civil Works, U.S. Army Corps of Engineers*

Dear Members,

MG Riley

Much of the Nation's foreign trade conducted through our maritime and inland waterways navigation networks represents a significant proportion of the U.S. Gross Domestic Product (GDP), since foreign trade as a percentage of GDP has grown from 8 percent in 1959 to 29 percent at present. With total U.S. waterborne commerce forecast to at least double over the next 20 to 25 years, we must continue to build and maintain a safe, environmentally sustainable, and reliable navigation infrastructure system.

The U.S. navigation network is now facing significant challenges that have potential to adversely impact future international trade and, thus, the Nation's economic prosperity. Channel availability is decreasing. Larger vessels are coming on line in world trade, many requiring channel depths greater than 45 ft. Meanwhile we find ourselves battling with the need to both reduce costs for dredging operations as well as manage disposal facilities and contracts. The future will bring even more challenges in achieving environmentally sustainable navigation

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infrastructure development, fulfilling our dredging responsibilities, and managing dredged material.

To help us succeed in the future, we are presently seeking:

- ***Authorizations as a System.*** The authority to collaboratively study, build, and maintain a complete navigation network through the effort and resources of Federal, State, local, and private partners.

- ***Appropriations as a System.*** A commitment by all partners to resource activities over the life span of the system.

- ***Accurate System Characterizations.*** Assessments and reporting on the current levels of service being provided, with prioritized status and needs of system maintenance, rehabilitation, and improvement.

- ***Visionary and Transparent Leadership and Management.*** Use of risk-informed planning and decision making, stakeholder involvement, and adaptive execution processes to balance multiple demands on water projects from the life cycle perspective.

- ***Science and Technology Innovations.*** Reduction of key uncertainties in understanding and forecasting systems performance through cutting-edge research and development, used as a strategic enabler to support planning, stakeholder involvement, decision making, and adaptive execution.

If USACE and its partners (other Federal agencies, States, local governments, and those in the non-government sector) communicate the state of the Nation's infrastructure and its economic importance to the Congress, there is potential for renewed National priority on needed investments in the U.S. navigation network.

Collaboration is the key to accomplish these goals. We have a great opportunity to change the way we do business, save valuable resources, and improve our performance. Together, we can ensure the Nation's water transportation system continues to be our trade window to the world. In so doing, we will do our part to keep the Nation's economy strong, and preserve our natural treasures (our rivers and estuaries) for generations to come.

All the best to you.

Sincerely,

Major General Don T. Riley
President, U.S. Section, and Director of Civil Works, U.S. Army Corps of Engineers

PIANC NEWS

PIANC Executive Committee (ExCom) 2007 Activities *by Robert Engler, former Chairman, Environmental Commission*

The PIANC Executive Committee (ExCom) met three times in 2007 with significant emphasis being placed on the Promotion Task Force, ultimate formation of a Promotion Commission (ProCom), and selection of a professional firm to research and develop a comprehensive PIANC strategic marketing plan.

ExCom Approves New Studies

At the technical working level, the PIANC ExCom approved the following new Working Group (WG), Permanent Working Group (PWG), Task Group (TG), and Expert Group (EG) studies for the following PIANC Commissions:

- Inland Navigation Commission (InCom)
  - WG32 - Performance Indicators for Inland Waterways Transport
  - WG128 - Alternative Bank Protection Methods for Inland Waterways
  - WG129 - Waterway Infrastructure Asset Maintenance Management

- PWG1 - River Information Services

- Maritime Navigation Commission (MarCom)
  - WG55 - Safety Aspects of Berthing Operations of Oil and Gas Tankers
  - WG56 - Applications of Geotextiles in Waterfront Protection
  - WG57 - Stability of Pattern-placed Revetment Elements

- Environmental Commission (EnviCom)
  - EG2 - Environmental Benefits of Waterborne Transport
  - TG3 - Climate Change and Navigation
  - WG16 - Management in Ports and Waterways Related to Fish and Shellfish Habitat

- International Co-operation Commission (CoCom)
  - WG1 - Small Island Ports
  - WG2 - Best Practices for Shoreline Stabilization Methods
  - WG126 - Training in Ports and Waterways

- Recreational Navigation Commission (RecCom)
  - WG130 - Anti-sedimentation Systems for Marinas and Yacht Harbors
  - WG131 - Catalogue of Prefabricated Marina Elements

PIANC Leadership Changes

Staff changes to ExCom during 2007 include:

- InCom Chairperson, Dr. Sandra Knight (U.S.), resigned and was replaced by Mr. Ian White (UK).
- EnviCom Chairman, Dr. Robert Engler retired and was replaced by Mr. Harold Koethe (Germany).
- Mr. Shiv Batra (U.S.) is a new Vice President on PIANC ExCom, replacing Mr. Tom Wakeman (U.S.).
- MarCom Chairman Mr. T. D. Tromp (Norway) retired, and was replaced by Mr. G. Caude (France).

PIANC Activities

PIANC remains very active as technical advisor to the European Union and specifically on various environmental directives, the most recent being the Water Framework Directive (WFD). These international committee activities are led by Ms. Jan Brooke (EnviCom, UK). PIANC will also address various environmental subjects to include "Green Navigation," "Development of Environmental Win/Win Project Fact Sheets," and "Working with Nature," as related to navigation infrastructure maintenance and development.

Promotion Commission (ProCom)

The Promotion Commission (ProCom) is now established, and is co-chaired by Mr. van Schel, PIANC Secretary General (Belgium), and Mr. H. Fiers (Belgium).

Other PIANC Items of Interest

The Young Professionals (YP) group has been very active, and European National Sections YP subgroups are significantly growing in size. A 3rd Smart Rivers Conference was held in Louisville, Kentucky, this year and was most successful. It was previously discussed in the last edition of the PIANC USA Bulletin. Plans for the 125th Anniversary of PIANC are coming together for the 2010 Congress in Liverpool, UK. A history book covering the 125 years of PIANC is being prepared to commemorate this event.

EnviCom Meets in Yokosuka City, Japan, October 11th and 12th, 2007

by Edmond Russo

The 27th meeting of the PIANC Environmental Commission (EnviCom) was held on October 11-12, 2007, in the port of Yokosuka, Japan, at the Port

and Airport Research Institute (PARI). The EnviCom delegation had a formal greeting by the directors of PARI and Japan Section of PIANC.

Dr. Robert Engler, Outgoing EnviCom Chair, presents the Directors of PARI with gifts from the Mississippi Delta. Incoming Chair, Mr. Harald Koethe, Germany, (right) and Incoming Vice Chair and Secretary, Mr. Edmond Russo (second to left), accompany Dr. Engler with other members of EnviCom.

EnviCom members view an environmental laboratory tide cycling tank, which is designed for monitoring and measuring sub-aquatic vegetation and benthic species colonization potential in underwater dredged materials deposits.

EnviCom members toured the PARI laboratory facilities on structural, hydraulics, environmental, and earthquake science and engineering. The Institute's mission focuses on addressing significant scientific, engineering, and technological challenges that Japan faces with development stressors on the environment, as well as the destructive threats of tsunamis and earthquakes on populations and infrastructure.

EnviCom members also attended a tour of airport and port projects implemented and under construction in Tokyo Bay. The bay area has a high density of development that supports multiple uses of navigation, air travel, inhabitation, vehicular transportation, and recreation. With growing public interest and need to maintain environmental quality, the Japanese have emarked on a number of initiatives to study needs for the restoration of the bay's ecosystem.

Specialized vibro-compaction rigs clustered along the route of a new airport runway adjacent to a busy navigation channel into the Port of Tokyo.

Leadership Changes

Dr. Robert Engler, retired Senior Scientist with the U.S. Army Engineer Research and Development Center, now with Mofatt and Nichol Engineers, announced that the October 2007 EnviCom meeting is his last as Outgoing Chair, having participated in the Commission for the last 15 years as a founding member. Mr. Harald Koethe, with the Federal Ministry of Transport, Building and Urban Affairs, Germany, is Incoming Chair, and co-chaired the meeting. Dr. Engler was recently elected to the position of PIANC USA Vice President, Southeast Region, and remaining active in PIANC beyond EnviCom participation. In February 2008, Mr. Tiedo Vellinga, with the Port of Rotterdam, The Netherlands, will be outgoing Vice Chair and

Secretary, and Mr. Edmond Russo, with the U.S. Army Engineer Research and Development Center, will be incoming.

EnviCom Activities

Publication Groups. Task Groups (TGs) are formed by PIANC Commissions to assemble experts in a general field using their subject area knowledge to form general opinions at the strategic level. The goal of TGs is to form the basis for tactical activities to be advanced, to include formation of Workgroups (WGs). Following tradition, WGs are 2 to 3-year efforts to develop technical reports on specific subject topics where there is consensus to develop Terms of Reference (TORs). EnviCom, in collaboration with other PIANC Commissions, has a diverse and extensive number of WG, TG, and TOR development activities ongoing, as follows. The Commissions will issue brochures on each of the following WG technical reports upon completion to announce publication.

- EnviCom WG11, Management, reclamation of dredged material and end use of existing disposal facilities.
- EnviCom WG12, Sustainable waterways within the context of navigation and flood management.
- EnviCom WG13, Management practices applied to dredging and dredged material disposal for the protection of the environment.
- EnviCom WG14, Dredged material as a resource.
- EnviCom WG15, Navigation around Coral.
- EnviCom WG16, Navigation and (Shell-) fish Habitat.
- InCom WG27, Environmental impacts of vessels.
- MarCom WG43, Minimising harbor siltation.
- MarCom WG51, Water injection dredging.
- EnviCom TG3, Climate change and navigation.
- EnviCom TG1, European Union (EU) Water Framework Directive.
- TG2, Environmental benefits of waterborne transport.
- TOR, Shore side electricity.
- New TOR on EU guidelines for sustainable maritime navigation and infrastructure.
- TG on TBT contamination on port and waterway operations, anti-fouling consequences for Navigation.
- New TOR on environmental risk evaluation and management.
- New InCom WG, experiences with alternative bank protection methods for inland waterways.

Working with Nature. EnviCom is developing a position paper on "working with nature" which creates a new philosophy for PIANC on how to implement navigation projects in the environment. The position paper will focus on working with nature in a sustainable way during developing and maintaining navigation infrastructure and associated operations, properly mitigating where necessary after sustainable measures have been planned and implemented. The audience of the position paper will be other PIANC commissions and Non-Governmental Organizations (NGOs).

Edmond Russo is Chief, Coastal Engineering Branch at the Coastal and Hydraulics Laboratory, U.S. Army Engineer Research and Development Center, Vicksburg, MS. He is incoming as 2008 Vice Chair and Secretary of the PIANC Environmental Commission. Edmond has served since 2004 as Chair of the PIANC USA Publications Committee and Editor of the PIANC USA Bulletin.

PIANC Announces Expert Group on "Environmental Benefits of Waterborne Transport"

PIANC has announced that the Environmental Commission (EnviCom) has established Expert Group 2 (EG2) to address "Environmental Benefits of Waterborne Transport." Chairperson of EG2 is Keith Hofseth, U.S. Army Corps of Engineers, Institute for Water Resources. Members include Nick Pansic, MWH Americas, Inc., and Al Cofrancesco, U.S. Army Corps of Engineers, Engineer Research and Development Center. Anyone who wishes to contribute to EG2 may contact either the Chairperson or these members.

Background

In recent years, intermodality had swung heavily in favor of road distribution as the most flexible, amenable, cost efficient mode of transport due to its fast "door-to-door service." This has inevitably lead to greater costs in terms of road congestion and environmental impacts.

The development of automated systems has significantly improved ports and shipping ability to move towards seamless transportation. This push for efficiency within the shipping sector, combined with the use of containers and roll on/roll off traffic has boosted the credentials of intermodal transport. This means waterborne transport now offers a more sustainable option for transportation.

A review of impacts and savings based on industry recognized measures will highlight the benefits inherent in moving freight, goods, and passengers by water. In addition to these assessments, the role of modern ports and inland waterways requires emphasis as ports have to be seen as a hub for linkage in any integrated transport system.

Objectives

The following areas form the basis for comparison and evaluation of different transport modes with respect to their environmental impact:

- Emissions overview of the impact of exhaust gases concentrating on carbon dioxide and monoxide, nitrogen, sulphur, water vapor, and particulate matter.
- Waste from the transport industry requires evaluation of areas such as oil and other hydrocarbons, and disposal costs of transport equipment at the end of the lifecycle.
- Review of transport modes, focusing on the split between different modes in the current freight movement statistics.
- Review of the whole transport cycle from producer to customer.
- Relative infrastructure requirements (e.g., channel dredging versus highway maintenance, etc.).

PIANC Announces Permanent Working Group on "River Information Services"

PIANC has announced that the Inland Navigation Commission (InCom) has established Permanent Working Group 1 (PWG1) to address "River Information Services (RIS)".

PIANC USA seeks U.S. Representatives for InCom WG1

PIANC USA is seeking candidates for Principal U.S. Representative, as well as potential members of a subcommittee, that will assist the Principal Representative with preparation of the WG1 Annual reports. Since this is a Permanent Working Group, the Principal Representative will be appointed for a 3-year term. The Principal U.S. Representative

should be able to attend meetings of the Working Group, which are usually held in a European city, approximately twice each year. PIANC USA does not provide travel or per diem expenses for Working Group participants. The individual U.S. Representative, or his/her agency, must provide such support.

Note that a second expert per country/ organization, being a young professional, can participate in the working group activities.

Please circulate this announcement among your colleagues who may have interest and expertise in this area. Those who wish to be considered for Principal U.S. Representative, or to participate on a subcommittee, are invited to send a brief curriculum vitae (electronically) to Anne Sudar Cann.

Thank you for your interest and involvement in PIANC.

Anne Sudar Cann, Secretary PIANC USA, U.S. Army Corps of Engineers, Institute for Water Resources, 7701 Telegraph Road, Alexandria, Virginia, 22315, phone 703-428-7166, e-mail R.Anne.Cann@usace.army.mil, internet web site http://www.iwr.usace.army.mil.

Background

In the last few years, there has been a growing political and environmental interest for sustainable development in transport. Inland navigation is regarded as an alternative means of transport for road transportation as it is a more environmentally friendly means of transport. On some major transport connections there is still some spare capacity in the waterway infrastructure.

To enable safe and smooth navigation some countries have introduced inland Vessel Traffic Services (VTS) systems. Some of these systems have been in operation for over 15 years. To make inland navigation an even more attractive transportation mode than at present, research and demonstration projects have been initiated to construct so-called Vessel Traffic Management Information Systems (VTMIS). These VTMIS should enable a wide variety of users to comprehensively plan resources used in inland navigation, thus making possible "just- in-time" transport and making inland navigation a perfectly fitting partner of integrated transport chains. Currently within the European Union (EU), VTMIS is specified as River Information Services (RIS).

The development of VTS and VTMIS in inland navigation, however, is mainly being executed on a national basis. The EE published in 2005 a directive on RIS. Implementation of these services will be effective in European countries in 2007/2008.

It can be an important role for a PIANC working group to make an update of developments on a regular basis, and to give recommendations for the application of specific techniques, systems, or services in non-European countries, and to provide an interface with maritime information systems such as the Automatic Identification System (AIS).

Objectives

Objectives of the work of InCom PWG1 include:

- Observing the development of RIS.
- Submitting to InCom a short annual report on the status of operating, implementing, and/or developing RIS in different parts of the world, including lessons learned from implementation and standards.
- Reviewing the "Guidelines and Recommendations for River Information Services."
- Providing feedback to European and international standardization groups.

Philip Appointed to PIANC USA Commission

Dr. Craig Philip was recently appointed by the Assistant Secretary of the Army (Civil Works), John Paul Woodley, Jr., to the Commission of PIANC USA. Dr. Philip replaced Mr. Joe Pyne, whose term ended in December 2007. Dr. Philip is President and CEO of Ingram's barge and related marine transportation companies, one of the largest diversified inland marine carriers in the U.S. serving major international and domestic shippers of bulk commodities. He has previously served as Senior Vice President and Chief Commercial Officer, and Vice Presidents of Marketing, Transportation, and Strategic Planning for Ingram Barge Company. From 1987 until 1991, Dr. Philip was at Southern Pacific Transportation Company, where he served as Vice President of the Intermodal Division. Prior to that, he served as the Director of Marketing for Conrail. Dr. Philip has also taught civil engineering at Vanderbilt University, Princeton University, and Massachusetts Institute of Technology (MIT). He is responsible for more than 100 publications and presentations concerned with global and national transportation matters.

Dr. Philip received a BSE in Civil Engineering from Princeton University, and MS and PhD degrees in Engineering from MIT. He has been active in many professional societies such as the National Freight Transportation Association, American Society of Civil Engineers, and the Marine Transportation System National Advisory Committee. He is a past chairman of the American Waterway Operators Board of Directors, and the National Waterways Conference Executive Committee.

Craig E. Philip, President and CEO, Ingram Industries, Inc., and PIANC USA Commissioner.

McCarville Elected to PIANC USA Commission

James R. McCarville was recently elected to the PIANC USA Commission as the Eastern Region Vice President. Jim has over 30 years of port experience. He has served as the executive director of ports on the Great Lakes (Superior, Wisconsin, 1977-1984), U.S. east coast (Richmond, Virginia, 1984-1990), and the U.S. inland waterway system where he has been the Executive Director of the Port of Pittsburgh Commission (since 1994). From 1990 to 1993 Jim served as a private consultant advising governments of Brazil, Uruguay, and Mexico on matters of port organization, operational efficiency, and privatization, and the governments of both Panama and the United States on the strategic transition plan for the transfer of the Panama Canal.

James R. McCarville, Executive Director of the Port of Pittsburgh Commission, Pennsylvania, and PIANC USA Commissioner.

Jim is the past president and chairman of the national trade association of the Inland Rivers' Ports and Terminals, Inc. (IRPT). He has served as a member of U.S. Secretary of Transportation's (DOT's) Maritime Transportation System National Advisory Council (MTSNAC), and as member of the National Academy of Science Transportation Research Board panel that prepared the report on "The Maritime Transportation System and the Federal Role: Measuring Performance, Targeting Improvements." He is the principal author of a "Container on Barge Pre-Feasibility Study" published by the U.S. Maritime Administration. He is on the Board of Directors of both Waterways Council, Inc., and the National Waterways Conference. He is active on the Transportation Research Board's committee on Inland Waterways,

and is a member of PIANC Working Group 31 "Organization and Management of River Ports."

At the Port of Pittsburgh Commission, he has demonstrated leadership by securing federal funding for the rebuilding of the Port's aging infrastructure, and the advancement of new technologies for river transportation and information systems. The Port has recently been awarded a patent for a locking technology, called "SmartLock." He is particularity proud of his efforts at coalition building, especially the efforts that have led to the very successful "SmartRivers" benchmarking conferences for inland waterways in the U.S. and in Europe.

Jim is a native of Wisconsin. He is a graduate of Regis College in Denver, and holds advanced degrees in Foreign Service from Georgetown University, Washington, DC; and Urban Studies from Roosevelt University, Chicago, Illinois. Jim started his career as Lakefront Recreational Planner on the staff of the mayor of Milwaukee and, before that, as a community leadership trainer in the Peace Corps in Brazil.

New PIANC Working Groups Formed

PIANC announces the formation of five new Working Groups (WG).

- International Co-operation Commission (CoCom) WG126 "Training in Ports and Waterways."
- Inland Navigation Commission (InCom) WG128 "Alternative Bank Protection Methods for Inland Waterways."
- Inland Navigation Commission (InCom) WG129 'Waterway Infrastructure Asset Maintenance Management."
- Recreational Navigation Commission (RecCom) WG130 "Anti-sedimentation Systems for Marinas and Yacht Harbors."
- Recreational Navigation Commission (RecCom) WG131 "Catalogue of Prefabricated Marina Elements."

Principal U.S. Representatives Needed

PIANC USA is seeking candidates for Principal U.S. Representative, as well as potential members of a subcommittee, that will assist the Principal Representative with preparation of the U.S. portions of these Working Group reports. The Principal U.S. Representative should be able to attend meetings of the Working Groups, which are usually held in a European city, approximately twice each year. PIANC USA does not provide travel or per diem expenses for Working Group participants. The individual U.S. Representative, or his/her agency, must provide such support.

Please circulate this announcement among your colleagues who may have interest and expertise in this area. Those who wish to be considered for Principal U.S. Representative, or to participate on a subcommittee, are invited to send a brief curriculum vitae (electronically) to Anne Sudar Cann. Ann will also provide complete Terms of Reference for these working groups.

Thank you for your interest and involvement in PIANC.

Anne Sudar Cann, Secretary PIANC USA, U.S. Army Corps of Engineers, Institute for Water Resources, 7701 Telegraph Road, Alexandria, Virginia, 22315, phone 703-428-7166, e-mail R.Anne.Cann@usace.army.mil, internet web site http://www.iwr.usace.army.mil.

CoCom WG126 "Training in Ports and Waterways"

Background. In Countries in Transition (CiT) there is a pressing need to get specialist training on

hydraulic, coastal, and structural engineering aspects related to ports and waterways, and in other areas such as environmental, economic, and logistical aspects. Many young professionals embarking on careers in port engineering only have basic training as a civil engineer and learn the ropes through practical experience. Thus, the need has been identified by PIANC to set up a WG on "Training in Ports and Waterways," to analyze existing training courses worldwide in the field of ports and waterways, to identify gaps in training provisions, and to devise appropriate training programs. An important aspect of training is skill-building of the trainers themselves. In preparation of this WG, a Task Group is making an inventory of existing courses, which will be available to the Working Group.

Objectives. The following objectives have been set for CoCom WG126:

- Preparation of report with an overview of existing (short) courses for professional training in the field of ports and waterways.
  - Categorize according to main focus area (technical, environmental, economic, logistical, etc.).
  - Identify direct training and train-the-trainer programs.
  - List strengths and weaknesses.
- Give special attention to distant-learning courses as these may be of particular interest to professionals from CiT.

The report will also indicate whether specific areas are not covered by the existing courses (possibly region-specific), and make recommendations on how to improve these omissions.

InCom WG128 "Alternative Bank Protection Methods for Inland Waterways"

Background. Since the mid 1980s, considerable interest has grown in the use of softer forms of bank protection to reduce costs, increase environmental benefits, and more recently to demonstrate sustainable construction. In 1987, PIANC produced guidelines on the design and use of such techniques that were well-received and used to create industry standards.

In 2007, PIANC InCom WG27 reported that an increasing number of alternative bank protection measures are being implemented across the world in navigation channels. However, there is very limited published guidance based on actual experiences with existing alternative bank protection methods that identifies effective alternatives that can be used under specific project boundary conditions:

Further work has recently been undertaken by other PIANC working groups, namely MarCom WG56 "Application of Geotextiles in Waterfront Protection," and CoCom WG2 "Best Practices for Shoreline Stabilization Methods," to consider the use of geo-textiles in a coastal environment.

These guides, however, do not clearly state how effective these bank protection techniques have proven to be in operation. They only list a few examples based on results soon after installation. Presently there is not enough information available to avoid repeating mistakes of inappropriate installation of innovative bank protection.

Objectives. The objectives of new InCom WG128 are: (a) to understand, evaluate, and report on the effectiveness of innovative (alternative) bank protection measures as related to different impact influences and boundary conditions for fulfilling the technical purposes and improving the ecological conditions, and (b) to formulate recommendations based on results obtained from assessments of physically implemented schemes.

From the European perspective, the mandate of the Water Framework Directive and other initiatives has created a requirement for results that should be available as soon as possible. Therefore, restrictions on the range and extent of the field of inquiry are necessary. To create an even more finite

scope of activity by the working group, bank protection in lakes should be considered extraneous to the report.

InCom WG129 "Waterway Infrastructure Asset Maintenance Management"

Background. To ensure the safety of infrastructure constructions with respect to limited financial resources and increasing computer capabilities, asset management systems for infrastructures are being more and more implemented. The general problem of waterway constructions (compared with bridges, for example) include the different features (e.g., locks, weirs, culverts, safety gates, ship lifts, etc.), and the different construction types (e.g., reinforced concrete, gravity walls, sheet pile walls, with/without water saving basins, different hydraulic systems, different gate types), combined with their specific kinds of use and damages (including the different effects these damages will have). It is known that most PIANC members responsible for waterways safety use computerized asset management systems.

Objective. The main goal of inland Waterway Infrastructure Asset Maintenance Management systems is to develop useful, objective, and comparable indicators for present and future state of the assets to be able to control maintenance and to plan the necessary budget.

The objective of this WG is to compare national standards of (a) asset condition grades, (b) typical damages/classes and models of movement/ development based on specific waterway assets, and (c) different practice to start (or not) maintaining facilities. This WG also will make recommendations for common standards (where that will be helpful). This WG seeks to gather input from different waterway managers, consultants, and administrations.

The result of this endeavor will be a tool to assist decision-makers in prioritizing expenditures on infrastructure maintenance and repair, and to act with the most efficient effects. This tool can also be part of a computerized asset management system or a worldwide database (if there is a subsequent need).

RecCom WG130 "Anti-sedimentation Systems for Marinas and Yacht Harbors"

Background. The intention of this working group is to highlight the problems for marina and yacht harbour operators regarding dredging procedures, and the increasing costs as a affect of current and upcoming international regulations and legislations. These increasing costs are basically caused by the international policy of 'the polluter has to pay.'

Based on Dutch national surveys, it appears the majority of the pollution of sediment in marinas is coming from outside of the marina and their operations. At least 85 percent of the sedimentation is coming from beyond the marina boundaries.

It is possible to reduce these extreme costs and environmentally difficult action of dredging by implementation of technical measures and processes to reduce or avoid sedimentation in the harbours.

Objective. The objective of WG130 is to develop guidance so marina and port authorities can define their own technical measures and processes aimed at the special circumstances of the marina and or yacht harbours to decrease sedimentation within the port or marina.

Consideration will be given to the effect of wind, wave, and/or currents in relation to these technical measures, processes, and safety guidance. WG130 will review the problem on the basis of existing literature and research, and draft clear and practical guidelines.

RecCom WG131 "Catalogue of Prefabricated Marina Elements"

Background. Presently the use of prefabricated elements in the construction of marinas is a very

common practice. Prefabricated elements usually represent important advantages (higher performances, ecological benefits, cost reduction, construction efficiency, etc.).

Marina designers and contractors are now facing the problem of identification and selection of the optimum product for their specific work. Information on prefabricated elements is presently dispersed, not easy available, and almost impossible to be comparison evaluated.

PIANC, as an international non-profit association, is in an optimum position for producing a "Catalogue of Prefabricated Marina Elements." This document, which would include an exhaustive list of products, could be very useful for managers, port authorities, engineers, marina designers, and other marine professionals.

The catalogue will be focused on prefabricated units used for the construction of the following types of marina elements: (a) pontoons, (b) floating structures and facilities, (c) revetments and decking elements, (d) mooring systems, and (e) other features of typical recreational marinas.

Objectives. The task of RecCom WG131 will consist of collecting and processing technical and commercial information on all types of prefabricated units developed for the above mentioned purposes when (a) commercial or technical references exist, and (b) the element has actually been used at a prototype marina installation.

The findings of WG131 will be published as a Catalogue or list that will include a standardized form for each type of unit comprising:

- Basic technical features (shape, dimension, photographs, etc.).
- List of references of technical performances.
- List of references of existing applications.
- Commercial status (patent, information, commercial address, etc.).

MarCom Working Group 49 (WG49) Update: Horizontal and Vertical Dimensions of Fairways

by Michael J. Briggs

Meeting Venue and Attendance

Maritime Navigation Commission (MarCom) Working Group 49 (WG49) "Horizontal and Vertical Dimensions of Fairways," held its sixth meeting at the Flanders Hydraulics Research (FHR) facilities in Antwerp, Belgium, on October 25-26, 2007. The purpose of WG49 is to update the PIANC WG30 1997 report on "Approach Channels." A total of 17 members and two guests from 12 countries participated in this meeting. This was one of the best attended and greatest participation of the six meetings to date (must have been the Belgium chocolate!).

Agenda

The 2-day meeting was designed to expedite the group's progress on its final report by allowing more time to discuss the organization and finalize authorship and develop time schedules. Other major items of discussion included: (a) design ship descriptions, (b) nomination and selection of channels for case studies, and (c) comparisons of different methodologies for channel width design. A tour of the FHR facilities was conducted at the end of the second day.

WG49 Report

All members agreed that the WG49 report should retain the sections and organization of the original WG30 report as much as possible, while ensuring that all guidance is practical, conservative, and safe. The new WG49 report will be approximately the same volume as the original WG30 report, but with the possibility of additional information and data in web-based appendices.

Members and guests of WG49 in attendance, left to right, first row; Paul Scherrer (France) and Hans Moes (South Africa): Second row; Jose Iribarren (Spain), Jarmo Hartikainen (Finland), Esa Sirkiä (Finland), and Don Cockrill (UK): Third row; Rink Groenveld (the Netherlands), Werner Dietze (Germany), and Martin Boll (Germany): Fourth row; Pierre Debaillon (France), Larry Cao (Canada); Carlos Sanchidrian (Spain), Michael Briggs (U.S. Principal Representative), Marc Vantorre (Belgium), and Terry O'Brien (Australia). Not shown; Chairman Mark McBride (UK, taking photograph), Kohei Ohtsu (Japan),and Guests Masanori Tsugane (Japan) and Masayoshi Hirano (Japan).

WG49 members in attendance split into three subgroups to expedite the discussions of the different sections in the report. Rink Groenveld (The Netherlands) headed up the "Horizontal" subgroup whose task was to discuss the basic structure and general methodology for the sections dealing with channel and waterway horizontal dimensions. Michael J. Briggs (U.S.) chaired the "Vertical" subgroup whose mission was to focus on the chapters dealing with vertical dimensions, including water levels and tide predictions, underkeel clearance, vessel squat, wind- and wave-induced motions, navigable depth and muddy bottom issues, air draft and clearance, and probabilistic design. Chairman Mark McBride (UK) headed the "General" subgroup whose task was to finalize the overall organization, and ensure continuity among the different sections and the other miscellaneous sections.

After several breakout sessions, WG49 finalized the authorship and schedules for the draft report. All members were instructed to provide contributions to primary authors by February 15, 2008, and primary authors will provide initial drafts to Chairman McBride (UK) by March 20. The "Vertical" subgroup expects to circulate a first draft by mid-January.

Design Ship

The "Design Ship" report section will be revised to include some of the new research on statistics by the Japanese shipping industry. The types of ships will be updated to include liquefied natural gas (LNG) and liquefied petroleum gas (LPG) ships, newer and larger containerships, and fast ferries. Definitions of some new shipping terms will be provided for AfroMax, Ultra-Post-Panamax, MallacaMax, and CapeSize.

Channel Examples

Several example harbor sites were suggested as good candidates for case studies in a new Appendix E of the WG49 report. Preliminary candidates include Bremen, Belfast, Zebrugge, Amsterdam, and the Elbe River, as data are available for these channels since they are in the process of harbor improvements. These examples will provide "real world" case studies for consistency throughout the report. Members were requested to forward any additional channel candidates to Chairman McBride (UK) prior to the next meeting.

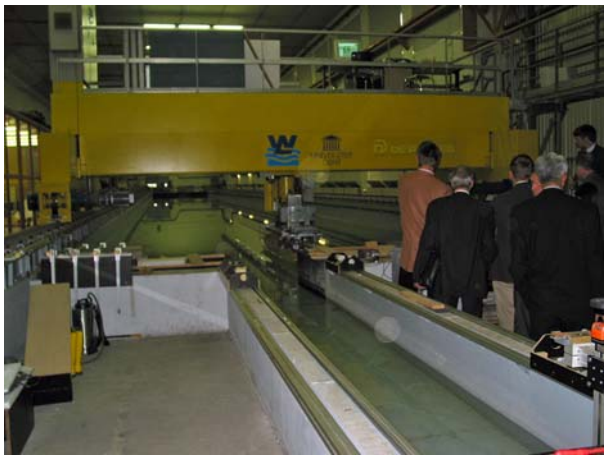
New Channel Width Methodology

Dr. Masayoshi Hirano (Japan), Captain Masanori Tsugane (Japan) and Dr. Kohei Ohtsu (Japan) presented a new methodology for predicting channel width. They had done some comparisons with the existing guidance from the WG30 report. Although this method looked promising, the WG49

decided that we should do some additional comparisons with our own data, and make a decision at our next meeting. Dr. Ohtsu (Japan) will provide a user friendly PC and a "by hand" version for members to exercise.

Tour

At the end of the second day, WG49 members and guests were given a tour of FHR numerical and physical modeling facilities. The members were shown the 225- and 360-deg numerical ship simulators, the automated ship towing carriage, a physical model of the Scheldt basin, and a model of the Panama Canal. The automated tow carriage allows continuous, unmanned model runs of different ship and channel configurations in the study of bank effects on ship response. Limit switches are built in the computer-controlled tow carriage to shut down the system if specified tolerances are exceeded. The computer automatically repositions the model and waits a prescribed time between runs. The Scheldt River basin model allows visualization of moveable bed material to study effects of proposed structural and alignment changes on the flow and environment. The Panama Canal model is a small-scale model to study the impacts of proposed lock designs on the new improvements to this major commerce connection between the Atlantic and Pacific Oceans.



Automated ship tow carriage and flume at Flanders Hydraulics Research, Antwerp, Belgium.

Next Meeting

The next meeting of WG49 is tentatively scheduled for April 17-18, 2008, at the Maritime Research Institute Netherlands (MARIN) facilities in Wageningen (suburb of Amsterdam), The Netherlands. It will be hosted by Professor Jos van Doorn (The Netherlands).

Michael J. Briggs, Principal U.S. Representative to MarCom WG49, is a research hydraulic engineer at the Coastal and Hydraulics Laboratory of the U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi, USA.

Announcement and Call for Papers

Gulf Coast Hurricane Preparedness, Response, Recovery, and Rebuilding Conference

A Regional Conference with International Application, Mobile, Alabama, November 2008

The Gulf Coast Hurricane Preparedness, Response, Recovery, and Rebuilding Conference is being organized by PIANC USA. The objectives of the event are: (a) to learn from recent hurricane experiences and challenges; (b) to develop proactive navigation preparedness, response, and recovery plans on regional and watershed scales; (c) to foster interagency learning, coordination, and cooperation leading to community and ecosystem resiliency; and (d) to provide technical experience and directions for engineering and environmental challenges.

This conference is a "must attend" conference for all professionals interested in sharing knowledge and experience in post-storm ecosystem restoration and coastal infrastructure protection. Take this

opportunity to share your personal insight, technical experience, and knowledge by submitting an abstract for consideration. Conference information will be posted at *www.pianc.us*.

Hurricane Katrina damages (photograph by National Oceanic and Atmospheric Administration).

Co-Sponsors

- American Association of Port Authorities.
- Association of Floodplain Managers of Mississippi.
- Coasts, Oceans, Ports and Rivers Institute of ASCE.
- Northern Gulf Institute.
- U.S. Army Corps of Engineers.

Conference Format

This 3-day conference will include:

- Technical presentations.
- Exhibits.
- Technical field tours to local sites of interest.
- Pre-conference workshops.
- Networking functions.
- Featured luncheon speaker.

Conference Topics

- Long Term Economic and Environmental Recovery.
- Emergency Preparedness.
- Watershed Wide Flood Hazard Master Planning.
- Self-Sustaining Ports.
- Navigation.
- Regional Sediment Management.
- Ecosystem Resiliency.
- Community Resiliency.
- Beneficial Uses of Dredged Material.
- Flood and Storm Damage Reduction.
- Engineering and Environmental Challenges.
- Technological Advances.

Abstract Submission Information

Each abstract must be written in English and limited to 500 words. Abstracts shall be submitted to *pianc@usace.army.mil*. Deadline for abstract submissions is April 5, 2008.

On the abstract form, please:

- Designate the conference topic listed that best fits your paper.
- Provide the required contact information for the corresponding author and any co-authors.
- Include a text-only summary description of the topic of the paper, and a statement as to why the paper will be of interest and benefit to conference attendees.

Proposing authors must recognize that submission of an abstract indicates commitments to attend the conference to present the paper. PIANC USA will accept or reject proposed papers based on the information provided in the abstract. To the extent possible and appropriate, papers will be assigned to conference technical sessions based on the topic identified by the author and co-authors, as best suited for their subject material. PIANC USA

reserves the right to assign papers to other conference sessions. For questions regarding abstract submission, please contact PIANC USA at *pianc@usace.army.mil*.

Technical Workshops

Technical workshops are planned for the day prior to the conference. Any professional who is interested in conducting a technical workshop related to the conference topics, and who has a strong background in the specific technical field of expertise, should submit a workshop proposal to PIANC USA. The proposal should include a description of the proposed presenter's qualifications and credentials, a summary of the proposed course content, and a description of how participants will benefit from course attendance. Please send proposals to *pianc@usace.army.mil*.

Mobile, Alabama

The Gateway to the Gulf Coast, Mobile, Alabama, is a beautiful, historic, port city by Mobile Bay. From historic homes under a canopy of majestic oaks to lush, tropical gardens, Mobile offers a Southern charm that is unique and enjoyable for visitors from around the world. Founded by the French over three centuries ago, Mobile was once the capital of the Colony of Louisiana and later governed as colonies of both Britain and Spain. Mobile's "gumbo culture" makes it a vibrant port city that is unique in America.

Find out all that Mobile Bay has to offer when you attend the conference. With its unique attractions, fresh delicious seafood, Delta excursions, fascinating museums, 21 world-class golf courses, white sandy beaches, and beautiful historic homes, the possibilities are endless!

Exhibits and Sponsors

If you are interested in exhibiting and sponsorship opportunities for this conference, please contact Kelly Barnes at *kelly.j.barnes@usace.army.mil* or 703-428-9090.

INDUSTRY NEWS

National Waterways Conference (NWC) 2007 held November 7-9, in Mobile, Alabama

The National Waterways Conference (NWC) 2007 annual meeting with the theme "Waterways: Meeting Tomorrow's Freight Needs" convened on evening of November 7, in Mobile, Alabama, with a Welcome Reception at the Riverview Plaza Hotel.

The Technical Sessions were called to order by Chairman Scott Robinson, Port Director, Muskogee City-County Port Authority, Muskogee, Oklahoma, on morning of November 8. He introduced the Honorable Sonny Callahan, former U.S. Congressman and Chairman of the Energy and Water Development Appropriations Subcommittee and fervent supporter of the Port of Mobile, who delivered welcoming remarks and the opening keynote address to the conference.

Scott Robinson, Chairman of the 2007 National Waterways Conference.

Honorable Sonny Callahan, former U.S. Congressman, State of Alabama.

The mission of NWC is to effect common sense policies and programs by recognizing the public value of our Nation's waterway system and its contribution to public safety, a competitive economy, security, environmental quality, and energy conservation. NWC is dedicated to a greater understanding of the widespread public benefits of the American waterway system.

NWC works for common-sense policies that maximize the economic and environmental value of our inland, coastal, and Great Lakes waterways. As part of that effort, NWC promotes realistic project evaluation criteria, adequate risk assessment analyses, funding levels that maximize the return on investment for taxpayers, recognition of the integration of water project purposes, and a Federal Intermodal Transport Policy. Additionally, NWC opposes oppressive water transportation user charges and discriminatory cost-sharing proposals that would cripple waterway-related industry. An advocate of enlightened flood control policies, NWC opposes cost sharing at levels that would jeopardize vital flood protection.

Since 1960, the NWC has worked to promote a better understanding of the public value of the American waterways system, and to document the importance of far-sighted navigation and water resources policies to a sound economy, industrial and agricultural productivity, regional development, environmental quality, energy conservation, international trade, defense preparedness, and the overall national interest.

Session I: State of the Corps of Engineers and Its Programs

Session I was moderated by Scott Robinson, and consisted of discussions regarding the present status of the U.S. Army Corps of Engineers by three senior Corps Headquarters staff, including Steven Stockton, Deputy Director of Civil Works; Gary Loew, Chief, Programs Integration Division; and James Walker, Chief, Navigation Branch, Operations Division.

Session II: Port Growth and Modal Effects on the Public

Session II was moderated by Fred Rickert, Vice President, Cooper Marine and Timberlands, Quinton, Alabama. "A Ports Response to Anticipated Growth in Trade" was discussed by Brian Clark, Project Director, Mobile Container, A. P. Moller (APM) Terminals International, The Netherlands. "Modal Comparisons of Freight Transportation Effects on the General Public" was presented by Jim Kruse, Director, Center for Ports and Waterways, Texas Transportation Institute, Houston, Texas.

Session III: Transportation, the Lure that Landed the Big Tuna

Session III was moderated by Tim Parker, Chairman, Alabama State Port Authority, and Member of the Inland Waterways Users Board. The decision-making process to arrive at Mobile, Alabama, as the site of the $3.7 billion ThyssenKrupp's new steel production facility in the U.S. was discussed by Bob Hess, Consulting Partner and Engagement Manager, Cushman and Wakefield, Rosemont, Illinois; Ernst Bernsdorf, Senior Vice President, ThyssenKrupp Stainless, Duisburg, Germany; and Jai Mahnke, Vice President, ThyssenKrupp Steel USA, Mobile, Alabama.

Session IV: Freight Transportation: A State's and Riverport's Perspective

Session IV was moderated by Ron Coles, President, Hanson Professional Services Inc., Nashville, Tennessee. Larry Brown, Executive Director, Mississippi Department of Transportation, Jackson, Mississippi, presented that state's perspective. Ken Canter, Executive Director, Paducah/McCracken County Riverport Authority, Paducah, Kentucky, discussed the riverport's perspective.

Session V: CMTS Update, FEMA Flood Plain Regulations, and Closing Address

Session V was moderated by Scott Robinson who introduced the new Board of Directors and Officers for 2008. Pat Mutschler, Committee on Marine Transportation System (CMTS), Washington DC, discussed CMTS update. Rob Rash, Chief Execute Officer, St. Francis Levee District, West Memphis, Arkansas, reported on proposed Federal Emergency Management Administration (FEMA) flood plain regulations. The closing keynote address was delivered by Tony Furst, Director, Office of Freight Management and Operations, Federal Highway Administration (FHWA), Washington DC, who discussed FHWA national freight policy.

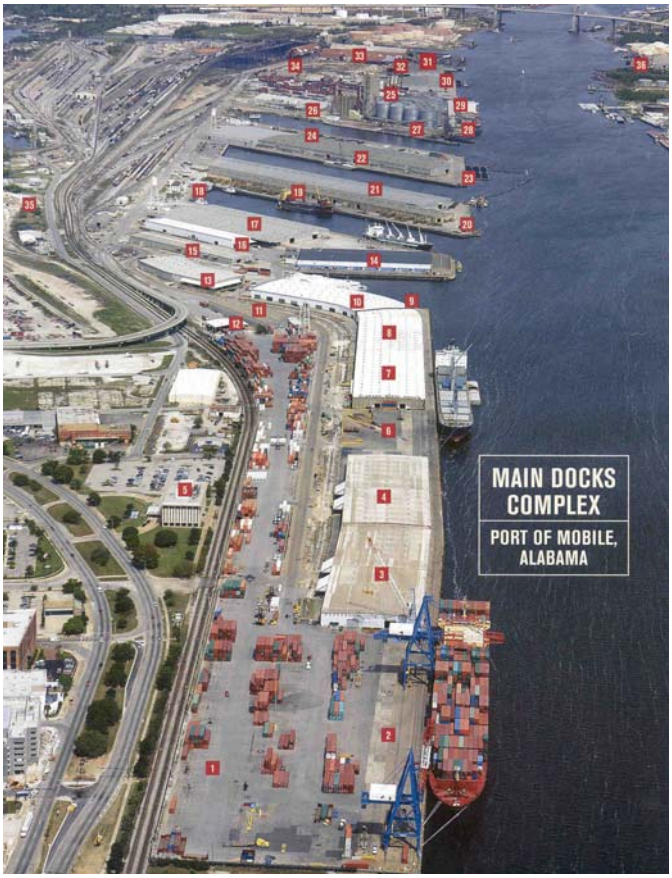
Mardi Gras Gala Dinner

Attendees were treated to a Mardi Gras gala dinner sponsored by the Port of New Orleans during evening of November 8, at the Carnival Museum. Mobile is not only recognized as celebrating the first-known American Mardi Gras in 1703 (even before New Orleans), but also as home of "America's Family Mardi Gras" delighting both young and old from around town and across the nation. This magnificent celebration lasts for nearly 2 weeks, and culminates on Fat Tuesday, the day before Lent.

Mardi Gras Carnival celebration, Mobile, Alabama.

Port of Mobile Tour

On morning of November 9, a tour of the Port of Mobile was arranged by the Alabama State Port Authority. The Port of Mobile is the 11th largest total throughput tonnage seaport in the United States, with over 56 million tons handled annually. The Alabama State Port Authority's public terminals serve breakbulk, bulk, containerized, and project cargoes, and represent half of the total annual volumes moving through the Port of Mobile. The Port has immediate access to two interstate systems, five Class I railroads, a rail ferry service to Mexico, and nearly 15,000 miles of inland waterway connections.



Port of Mobile, Alabama, general cargo operations cover almost 2 miles of waterfront and include 27 berths with a draft of 40 ft.

Port of Mobile, Alabama, McDuffie Island coal terminal has a 1,000-ft berth with ship unloader and double stacker, and conveyor system that handles both iron ore and coal.

State of the Corps and Its Programs as Reported to National Waterways Conference 2007 by Headquarters, U.S. Army Corps of Engineers (USACE)

Steven L. Stockton, Deputy Director of Civil Works, USACE, began the analysis by describing the situation in which the Corps finds itself today. More people than ever before reside in the United States, and more of those people choose to live near water. There is increasing competition for Federal dollars. There is less support by Congress for water resources in general and for the Corps of Engineers. There is a lack of public understanding of the link between infrastructure and quality of life. There exists sympathy for "anti-infrastructure" arguments. Opponents employ more sophisticated techniques to block projects. And there is perceived to be an unfriendly Office of Management and Budget.

Steven L. Stockton, Deputy Director of Civil Works, U.S. Army Corps of Engineers

Stockton expressed the opinion that old methods simply will not work in the new environment, and change is essential. Single- or limited-purpose projects with small constituencies can not compete with investment opportunities that have broad support bases. It is necessary to communicate more effectively, not just among the Corps' planning and operations personnel, but also with other resource agencies, Congress, and the public in general. If the Corps continues doing what it has always done, there will be decreasing effectiveness.

The Corps should become an organization that pulls together all water resources groups into an effective coalition. Participating resource groups should be as broad based as possible. The Corps should adopt the same public information, communications, and advocacy practices as other trade and industry associations.

Stockton believes strategic planning is essential. He quoted from "The Edge of Disaster" by Stephen Flynn. "...Americans are in denial when it comes to facing how vulnerable our Nation is to disaster, be it terrorist attack or Act of God...Our growing exposure to man-made and natural perils is largely rooted in our own negligence as we take for granted the infrastructure handed down to us by earlier generations. Once the envy of the world, our infrastructure is now crumbling...Resiliency...must now become our national motto... ."

The Corps must become an integrator of technologies, with both a national and global perspective. It must balance human necessities with environmental resource considerations. The Corps should have a more diverse technical and scientific workforce. It should marshal all its capabilities, and provide for an integrated delivery of products and transfer of technology.

Stockton pledged the Corps will enhance its partnerships and alliances, and maintain its leadership in the making of water resources policy. The Corps will leverage resources with other agencies, and will mobilize the full capability of the Corps team as needed.

Stockton further stated that the Corps will work with local and/or regional watershed councils to develop watershed management plans. The Corps will facilitate discussion among stakeholders with complementary or competing water needs. It will partner with other Federal agencies to address regional water issues, and will provide technical assistance to States and local communities. The Corps will share data and information, and will improve watershed models in cooperation with others.

President George W. Bush vetoed the Water Resources Development Act (WRDA) of 2007 on November 2, 2007, because of concerns about the overall cost ($23 billion), effect on already authorized projects, and lack of priorities. On the afternoon of November 8, during the NWC, the U.S. Senate joined the House in overriding the President's veto. The Act provides $7 billion for projects in Louisiana, and mandates independent peer review of USACE studies. It streamlines the process of de-authorizing obsolete projects, and increases participation in watershed planning. WRDA 2007 creates a National Levee Safety Program.

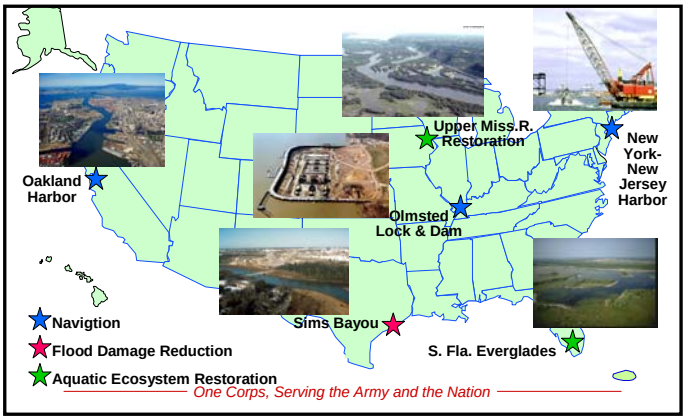
Next, Gary Lowe, Chief of the Program Integration Division, Directorate of Civil Works (CW), USACE, discussed program development and management of the Corps Civil Works Program. During FY07, the Corps executed about $6.8 billion in CW funding, including 5 planning and 15 construction project completions. This was accomplished with only $5.2 billion appropriated because of added funds for Katrina and other emergency supplementals. At least 93 percent of the Corps' budget is not Congressional adds.

Gary Lowe, Chief of Program Integration, U.S. Army Corps of Engineers.

The USACE provided timely guidance to its field offices, timely budget submission input to the Administration, and timely information and response to Congress. There was signification progress in risk calculation, risk management, and risk communication. The Corps developed prioritization, planning, and construction of Portfolio of Dams with dam safety issues, including levees. A Levee Certification Policy and Federal Levee data base was created. Rehabilitation of major projects continued, with Strategic Planning and Plan implementation. While executing the FY07 program, the Corps was also defending its proposed FY08 program, and developing the FY09 program.

The FY08 construction budget for National Priority Projects includes three navigation projects (Oakland Harbor, Olmsted Lock and Dam, and New York-New Jersey Harbor), two aquatic ecosystem restoration projects (Upper Mississippi River, and South Florida Everglades), and one flood damage reduction project (Sims Bayou). The FY08 CW budget ceiling is $4.8 billion. Of this amount, the minimum essential allocations consume about $4.4 billion, leaving about $400 million for all other CW projects and programs.

The Corps is increasingly turning to budgeting from the top, with goal- and performance-based budgets which define strategy, objectives, and performance metrics. The Corps will budget to achieve objectives of system budgeting from national, to regional, to local, with more emphasis on program, system, and regional benefits and with less emphasis on individual project benefits. Through 5-year planning, the Corps will be able to forecast improving or worsening conditions by system, region, and nation. It will be able to forecast progress (or not) towards national goals.



U.S. Army Corps of Engineers FY 08 National Priority Projects construction program.

An example of goal-based budgeting for navigation is the goal of maintaining projects to meet present and future needs. With an objective to maintain ports, a performance measure is the percent of time navigation channels are available to commercial users for high-commercial traffic (greater than 10 million tons at 95 percent availability) and medium traffic (up to 10 million tons at 85 percent availability). With an objective to maintain inland navigation channels, a performance measure is segment availability with no instances where mechanical failure results in lock closures greater than 24 hours.

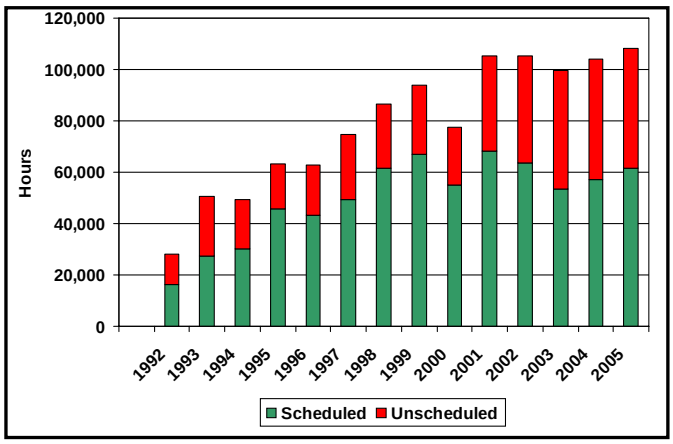
Lowe pointed out that the Corps input to developing the FY09 budget fully supports the President's overall priorities of (a) continuing long-term economic growth, (b) winning the Global War on Terrorism, and (c) securing the homeland. The Corps supports the mission priorities of (a) commercial navigation, and (b) flood and coastal storm damage reduction, and (c) aquatic ecosystem restoration.

Next, James Walker, Chief of the Navigation Branch, CW Operations Division, USACE, described inland navigation from the national perspective. At present there are almost 1,100 Congressionally authorized and constructed navigation projects, including 27 inland navigation systems and 237 navigation locks. There exists aging infrastructure with inadequate funding for annual operation and maintenance, and for non-routine maintenance. The navigation program requires (a) reliable inland river systems, (b) lock availability considering both scheduled and un-schedule lock closures, and (c) channel availability including both depth and width.

James Walker, Chief of the Navigation Branch, U.S. Army Corps of Engineers.

Regarding lock reliability and availability, the Corps is conducting a national navigation lock condition assessment, and is developing a prioritized list of maintenance needs. The reliability goal is to significantly reduce unscheduled lock closures that have accounted for about 40 percent of lock closures in recent years. Unscheduled lock closures has doubled in the last 5-6 years. The 5-year development plan is striving to reduce unscheduled lock closures to less than 20,000 hrs annually; it is now in excess of 40,000 hours annually.

Channel availability is determined by considering the channel cross section depths at the centerline, channel toes, and quarter points across the channel. The level of service standard requires full project depth across the entire channel for 100 percent of the time, but a more realistic goal has been set at full project depth at half the project width (quarter points) for 95 percent of the time. The trend of channel availability has been 38 percent in FY05 and 35 percent in FY06. The goal is to begin improvement increments in FY09, and arriving at the 95 percent availability by FY13.



Navigation lock unavailability, 1992-2005; Total Hours Scheduled versus Unscheduled Without Ice.

Corps future directions include the RAMP process: (a) Risk Informed; (b) Asset Management; and (c) Performance. Risk analysis categories include (a) structural, (b) operational, (c) life safety, (d) economic, (e) environmental, and (f) security. Asset Management encompasses maintenance management as well as the use of repair, rehabilitation, replacement, and retirement decisions. Facilities and Equipment Management (FEM) is the Corps asset management system, and will be deployed in 2008. Performance alludes to tonnage moved on the waterways, and the Corps will report what it is able to accomplish with the funds provided. It will be a transparent process for the stakeholders, the public, and Congress.

The bottom line is that investing in the navigation system is investing in economic development. America's infrastructure must become a National priority.

The Controversy over Free Trade Agreements, and Observations on U.S. Trade Trends *by David Grier*

On December 4, 2007, an otherwise sedate luncheon of the Organization of American States Committee on Ports was suddenly interrupted by loud shouts and cheers. The reason for the excitement was that the group attending the luncheon, which was being held on a pier over the Pacific in Lima, Peru, had just received word that the U.S. Senate had passed the bilateral U.S.-Peru Free Trade Agreement (FTA) by a lopsided 77-18 vote. Although the agreement had its share of vocal opponents in both the U.S. and Peru, it ultimately found wide support in Congress. It was signed into law by the President on December 14, in a White House ceremony attended by Peruvian President Alan Garcia and ambassadors from numerous Latin American nations. Both countries still need to modify some legislation to comply with terms of the treaty before it will go into effect.

Of four pending FTAs, the Peru FTA was the only one to pass Congress in 2007. The others – with Colombia, Panama, and South Korea – face stiffer opposition in Congress and an uncertain future in an election year during the twilight of the Bush Administration. Some candidates in the race for the presidency have called for a "time out" on new trade agreements or even to reopen negotiations on some provisions of existing agreements.

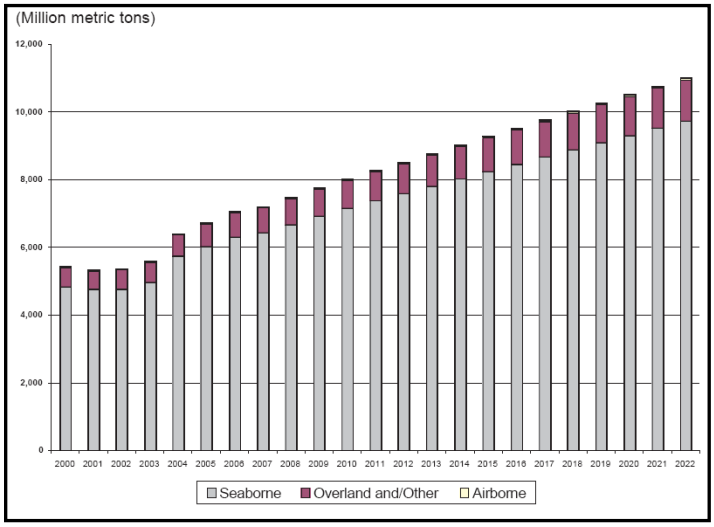
Known formally as the United States - Peru Trade Promotion Agreement, the Peru FTA is a bilateral agreement with the objectives of eliminating obstacles to trade, consolidating access to goods and services, and fostering private investment in and between the U.S. and Peru. Besides commercial issues, it incorporates economic, institutional, intellectual property, labor, and environmental policies, among others. Along with other proposed bilateral agreements, it will succeed the Andean Trade Preference Act (ATPA), which is set to expire in February 2008. The ATPA was originally enacted in 1991 and renewed and expanded in 2002. The ATPA eliminated tariffs on a number of products from Peru, Bolivia, Colombia, and Ecuador. Following more than a year of negotiations, an agreement was signed on the bilateral U.S.-Peru FTA on April 12, 2006, and was subsequently ratified by the Congress of Peru on June 28, 2006, and by the U.S. House of

Representatives on November 8, 2007, before the vote in the U.S. Senate.

Trade between the U.S. and Peru has indeed been growing, more than doubling over the past 3 years to nearly $9 billion. Proponents of the bilateral pact say the new agreement will allow trade to expand further by immediately eliminating duties on about 80 percent of U.S. consumer and industrial goods exported to Peru, and on more than two-thirds of U.S. agricultural exports, with additional duties to be eliminated over the next 5 to 15 years. Labor and environmental provisions were strengthened in this and other pending FTAs after a bipartisan agreement between the Administration and Congress in May 2007. Critics, however, have argued that these provisions are not sufficiently enforceable, that the pact will harm Peruvian subsistence farmers, and that manufacturing jobs in the U.S. will be lost as businesses relocate.

The Peru FTA is the most recent in a long series of bilateral and multilateral trade agreements over the past two decades, including the passage of the North American Free Trade Agreement (NAFTA) in 1994 and creation of the World Trade Organization (WTO) in 1995. The U.S. now counts bilateral FTAs with eight nations – Israel, Jordan, Chile, Singapore, Australia, Morocco, Bahrain, and now Peru. Add to this NAFTA partners Canada and Mexico and six countries under the Central America Free Trade Agreement-Dominican Republic (CAFTA-DR) – Guatemala, Honduras, Nicaragua, El Salvador, the Dominican Republic, and, as of October 2007, Costa Rica. Besides the three aforementioned FTAs awaiting Congressional approval, another four nations plus the Southern African Customs Union have agreements under negotiation or pending implementation. Also, the on-again/off-again negotiations under the so-called Doha Round of the WTO could lead to new trade arrangements among the 151 member nations of that international trade body.

The Office of the U.S. Trade Representative cites numerous statistics in support of FTAs, noting sizeable export gains. These include 150 percent increase in exports to Chile between 2003 and 2006, a tripling in the trade surplus with Singapore in the first year of the FTA with that island nation, and a 32 percent increase in the trade surplus with Australia in the first quarter after FTA implementation. Opponents, on the other hand, cite job losses in the U.S., impacts to industrial and agricultural labor in other countries, environmental degradation, and other negative impacts. While the debates continue over the benefits versus the costs of these various agreements to their signatory nations, it is clear that the past decade has witnessed a period of unprecedented expansion in global maritime trade, and with it new challenges for the world's ports and shipping fleets to handle growing cargo volumes.



Total world trade by mode. (Source by permission, Global Insight, Inc., "Trends in World Economics and Trade," Volume 2, October 2007).

And this trade continues to grow. While 2007 is expected to record a slowdown in the *rate* of overall trade growth to about 1.9 percent, total world maritime trade increased 5 percent in 2005 and another 4.5 percent in 2006, reaching about 6.3 billion metric tons. World seaborne trade volume is up an impressive 32 percent since 2002. According to the forecasting firm Global Insight, this trade is expected to grow a little under 3 percent annually, passing 7 billion by 2010 and reaching 9.3 billion metric tons by 2020. And, although China now claims the title of world's largest exporting nation

by value (13 percent share), on a regional basis the leader by seaborne volume is Latin America (including Mexico) followed by the Middle East. Thus, there exists the appeal of FTAs with nations of the region such as Peru, Colombia, and those in Central America.

Latin American seaborne exports averaged 16 percent annual growth in the period 2003-05 – partly driven by a surge in Chinese demand for the region's bulk products, including iron ore and grain. U.S. maritime exports have likewise seen a boost; up 7.8 percent by volume (and 18 percent by value) in 2006 and up another 11.3 percent by volume (and 9.3 percent by value) through October 2007. U.S. exports have been helped by the significant decline in the exchange rate of the dollar with many currencies, making U.S. goods much more competitive. And indeed, coupled with an attractive dollar, free trade agreements may have provided a marginal boost to U.S. export growth as well, with export volumes between 2005 and 2006 up by 10 percent to Singapore, 12 percent to the Dominican Republic, 17 percent to Chile and Honduras, 25 percent to El Salvador, 36 percent to Israel, and 68 percent to Jordan. So, while the pros and cons of FTAs will no doubt continue to be debated and the political climate for future agreements has become uncertain, the FTAs already in place at least seem to be promoting increased maritime trade with forecasts for continued growth over the decade ahead.

David Grier is a Senior Analyst for the U.S. Army Corps of Engineers Institute for Water Resources, , and has been Navigation Business Line Manager since 2004. Responsibilities include a variety of navigation studies in support of the Corps Civil Works program, Inland Waterways Users Board, a Congressional Advisory Board, and program monitoring for the Inland Waterways and Harbor Maintenance Trust Funds.

Transportation: The Lure that Landed the Big Tuna

ThyssenKrupp Steel USA, LLC; and ThyssenKrupp Stainless USA, LLC; on November 2, 2007, broke ground on the site of its $3.7 billion carbon steel and stainless steel processing facility near Mount Vernon in the Calvert, Alabama, community on the Tombigbee River about 25 miles north of Mobile. The groundbreaking marks the beginning of construction of the 3,500-acre plant. Set to open in 2010, the plant will employ as many as 2,700 workers when fully running, company officials said.

At the National Waterways Conference 2007 in Mobile on November 8, an entire technical session was devoted to discussing how this specific site was chosen from an original 67 sites and 25 ports under consideration. Desktop studies eliminated 35 sites and 19 ports, and site visits eliminated an additional 20 sites. Of the remaining 12 sites, only the six sites with ports were eventually considered viable alternatives, those being (a) Philadelphia, (b) Baltimore, (c) Norfolk, (d) Morehead City, (e) Mobile, and (f) New Orleans. These six possible sites were then reduced to head-to-head competition between Mobile and New Orleans. Tim Parker, Chairman of the Alabama State Port Authority and Member of the Inland Waterways Users Board, moderated the session that described how Mobile was selected as the location of the single largest private investment in United States history.

Tim Parker, Chairman, Alabama State Port Authority, introduces ThyssenKrupp representatives, and real estate advisor, to National Waterways Conference 2007.

Company Announcement

ThyssenKrupp had announced on May 11, 2007, that the Mobile region had been selected for the location of the new steel mill. "The global steel industry is undergoing a dynamic consolidation process. We are taking our own individual approach, with a clear forward strategy to further position ourselves as a global player in the steel markets of Europe and North America," Ekkehard D. Schulz, Chairman of the Executive Board of ThyssenKrupp, said. "This is the type of project that represents a very long-term commitment. We will be in Alabama for decades to come, providing good jobs for many generations."

Karl-Ulrich Koehler, Chairman of the Executive Board of ThyssenKrupp Steel and member of the Executive Board of ThyssenKrupp, added, "This new processing facility will allow us to strengthen our position in North America. It will create major advantages in terms of quality, costs, and access to a customer base with a demand greater than current supply."

"Our investment in Alabama is a central element of the ThyssenKrupp Stainless strategy. The NAFTA stainless steel market has great potential and we are committed to significantly expanding our business in this growth region," noted Juergen H. Fechter, Chairman of the Executive Board of ThyssenKrupp Stainless and member of the Executive Board of ThyssenKrupp.

The facility will include a hot strip mill which will be used primarily to process slabs from ThyssenKrupp's new steel plant in Brazil. It will also feature cold rolling and hot-dip coating capacities for high-quality end products of flat carbon steel. The facility will have an annual capacity of 4.1 million metric tons of carbon steel end products. In addition, a stainless steel melt shop will be built with an annual capacity of up to one million metric tons of slabs, which will also be processed on the hot strip mill. A cold rolling facility is to be built, which will be designed initially to produce 350,000 tons of cold strip and 125,000 tons of pickled hot strip. In addition, the stainless steel plant will provide ThyssenKrupp Mexinox in San Luis Potosi (Mexico) with its required pre-material (340,000 metric tons of hot band).

Mobile Mayor Sam Jones, along with Council President Reggie Copeland and the entire Mobile City Council, welcomed the announcement that ThyssenKrupp will build their record $3.7 billion steel plant there. "This is a game-changing decision for Mobile," said Mayor Jones. "We are no longer living on potential – we are living up to it. This plant will have a tremendously positive impact on our citizens for years to come."

Mayor Sam Jones, Congressman Jo Bonner, Dr. Thomas Woelker, Governor Bob Riley, Dr. Michael Rademacher, Councilman Fred Richardsan, and Councilman Reggie Copeland at the official document signing on Monday, May 14, 2007.

"I am so excited about knowing this is coming to Mobile - the jobs, the economic growth, and most importantly, the people who will learn why this city is such a great place to live," Council President Copeland added.

The project calls for 2,700 permanent jobs and nearly 30,000 workers to build the plant. The permanent jobs could pay between $50,000 and $65,000 annually once the plant is operational in 2010.

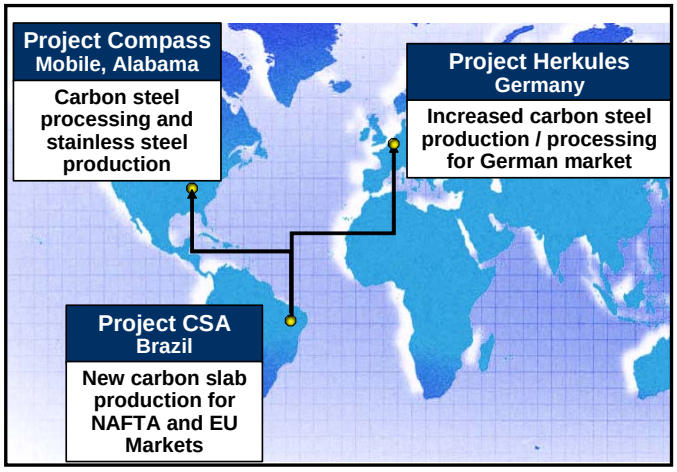
ThyssenKrupp carbon and stainless steel processing facility under construction on the Tombigbee River near Mobile, Alabama. The facility requires assured river, rail, and road access for transportation of incoming materials and supplies, and for outgoing products.

Site Selection Process

Bob Hess, Cushman and Wakefield Real Estate Advisors, described the process involved with deciding that Mobile was appropriate for the new multi-billion dollar steel plant. Four factors determined the search area, including (a) coastal port(s) for inbound slabs, (b) barge-navigable waterways, (c) anticipated customer concentrations, and (d) business climate. Throughout the process, candidate locations/sites were evaluated based on their performance against seven Critical Success Factors and their cost profile (20-year total costs, one-time and recurring), including (1) Quality of life, (2) Utility Infrastructure, (3) Skilled labor availability and quality, (4) Business climate perceptions, (5) Site suitability and Quality, (6) East of Implementation and timing, and (7) Supply chain effectiveness.

Bob Hess, Cushman and Wakefield Real Estate Advisors to ThyssenKrupp during steel plant site selection process.

Logistics costs comprise 50 percent of the annual costs. The inbound supply chain originates in Brazil or other locations; low-cost steel slabs arrive via Panamax Ship at Port of Mobile; slabs are unloaded at the Port onto river barges; and slabs are barged and unloaded at the steel mill. The outbound supply chain originates at the mill where coil or other steel forms are loaded onto rail or barge or truck for transport to customers in the United States, or loaded onto ships at the Port of Mobile for transport into the ThyssenKrupp Transatlantic Strategy.



Project Compass, Mobile, Alabama, is integral to ThyssenKrupp's global strategy to grow NAFTA market share and improve cost positions.

Container cranes at the Port of Mobile, Alabama.

Rail lines serving the Port of Mobile, Alabama.

Along with tax breaks, low electricity costs, and an estimated $400 million in financial incentives, Mobile offered a site with a route to the Brazil plant that will provide slabs for processing. The question arose as to why the plant could not have been located in China where labor costs are low. According to Mr. Hess, the cost for producing steel anywhere in the world is about the same. China is a very big country. The added cost for transportation made the overall cost of raw materials delivery and transportation of finished products prohibitive from a location in China.

Great Transportation Access was the Lure

In the final analysis, transportation was the lure that landed the ThyssenKrupp carbon steel and stainless steel plant to the Mobile, Alabama, region. Mobile has east-west and north-south interstate highways and railroads. And the Port of Mobile has deepwater shipping lanes for connection of the shallow-draft barge lines with ocean-going vessels for transport of raw materials and finished steel products throughout the world.

Port of Mobile Responds to Anticipated Growth in Trade

The Alabama State Port Authority (ASPA), headquartered in Mobile, Alabama, owns and operates the State's deepwater port facilities in Mobile. The Authority directly employs over 600 workers, and its facilities handled more than 25 million tons of cargo and posted over $87 million in revenues last year. The Authority's container, general cargo, and bulk facilities have immediate access to two interstate systems, five Class 1 railroads, and nearly 15,000 miles of inland waterway connections.

Brian Clark, Mobile Container Terminal (MCT) Project Director, described to the National Waterways Conference 2007 on November 8, how ASPA and the Port had responded to MCT's desire to build a new container terminal at the Port.

Brian Clark, Mobile Container Terminal Project Director.

Mobile Container Terminal

The ASPA and MCT on October 18, 2006, broke ground on their new container terminal at the Port. Alabama's Governor Bob Riley, U.S. Senator Richard Shelby, and Congressman Jo Bonner were on hand, along with executive management of both A. P. Moller-Maersk Terminals (APMT) North America and CMA CGM, Mayor Sam Jones of Mobile, Mobile County Commissioner Juan Chastang, and the Port Authority's senior management and board, to turn the ceremonial shovel of dirt marking the Port as the next alternate gateway to U.S. markets for containerized cargo.

Governor Riley lauded the new terminal as the state's newest transportation asset in a winning formula that is moving Alabama forward. "Alabama is experiencing unprecedented economic growth that is bringing new jobs and new opportunities to citizens all across our state. The improvements that are occurring at our port will

help create an economy that is even stronger," Governor Riley said.

Senator Shelby praised the Port Authority for expanding critical transportation infrastructure to serve growing freight and container volumes in the U.S. "The Port possesses deep water channels and excellent inland interstate, rail, and waterway connections that will provide Alabama manufacturers and the nation with a new low cost, efficient portal to state and regional markets. I was pleased to work with my colleagues to secure more than $60 million for this important expansion," he said.

MCT, a joint venture between APMT North America (80 percent) and Terminal Link USA, a division of CMA CGM (20 percent), will provide terminal customers with access to global networks covering all possible trade routes to and from the Port of Mobile. APMT will operate and manage the terminal.

Operations at the terminal are expected to begin in early 2008, with a start up capacity of more than 350,000 Twenty-foot Equivalent Units (TEUs). MCT will be developed in phases, and at completion will have an annual capacity of 800,000 TEU.

"We at APM Terminals are very excited to be part of this project which will provide us with another first-class addition to our portfolio of terminals in North America," said Tony Scioscia, president of APMT North America, based in Charlotte, North Carolina. "We are fully committed to building a terminal facility which will be second-to-none in terms of efficiency, productivity, and customer service. Equally important are the opportunities this terminal brings to the State of Alabama as well as the city of Mobile," he added.

The Port Authority has been constructing key infrastructure since receiving permits in early 2005. The Authority's Director and CEO, James K. Lyons, noted he is very pleased with construction progress. "We've held the project on schedule and we're looking forward to opening this and other port expansion projects in 2008 to serve growing cargo volumes in the port."

Benefits of the Port of Mobile

For the interests of MCT, the Port of Mobile held many attractive features, including a 45-ft channel to the wharf location and only 3 hrs steam time from the sea buoy. The turning basin upon completion will accommodate up to 8,000 TEU vessels. There is a strong commodity base in the region, including automotive, poultry, apparel, chemicals, and forest products, all with a balanced cargo flow. There also is a very favorable labor environment.

The Port has a well-established highway network, being adjacent to Interstate Highway 10, and only 5 miles from Interstate Highway 65. There also is ample opportunity to serve inland markets via waterway networks. The Port has access to five Class 1 railroads, with abundant availability of north-south and east-west rail capacity. The Port offers competitive inland costs to the south Atlantic and mid-West regions of the nation by all modes of transportation. Also, there exists great opportunity for expansion at the Port of Mobile.

ASPA Construction Schedule for Port of Mobile

Upland yard areas were available for handover to MCT for building construction, and Phase 1 yard completion was scheduled for late 2007. The wharf had 2,000 ft of deck poured, and berth dredging also was scheduled to commence in late 2007. Plans are being finalized for road improvements to provide for elevated track crossing, with project duration of approximately 12-18 months.

Mobile Container Terminal Specifics

Phase 1 construction at the MCT site within Port of Mobile will total 95 acres, with 178 refrigerated container plugs. Throughput capacity at start up in early 2008 will total 350,000 TEUs.

Mobile Container Terminal, October 2007.

Mobile Container Terminal at completion of Phase 1.

Shanghai's Zhenhua Port Machinery Company (ZPMC) 18-container-wide outreach, post-Panamax ship-to-shore cranes to be installed in early 2008.

Phase 2 construction will add an additional 40 acres with a total of 300 refrigerated plugs. These improvements are estimated to be needed within 5 years of start of operations.

Phase 3 construction will convert the facility to a Resistance to Ground (RTG) grounded facility. Full build out capacity will total 800,000 TEUs. These additional improvements are estimated to be needed within 12 years from start of operations (7 years from completion of Phase 2). MCT required a wharf length of 2,000 ft, with a draft alongside the wharf of 45 ft.

Mobile Container Terminal, Port of Mobile, Alabama, at end of Phase 3 full build out.

Alabama State Port Authority to Build New Steel Terminal

The Alabama State Port Authority's (ASPA) Board of Directors on May 15, 2007, approved a resolution authorizing the Port Director to construct, operate, and maintain a new marine terminal that will handle steel slabs for ThyssenKrupp. The Port Authority's action came just days following the announcement by the Supervisory Board of ThyssenKrupp that the company will build a $3.7 billion steel mill in Mobile County, Alabama.

Tim Parker, Chairman of the Board for the Authority, applauded the Board, Port management, and Team Alabama for their leadership throughout the project's competitive process. "Many, many folks worked long, hard hours to secure this project for the State of Alabama. The port now stands ready to provide the necessary marine assets to

make ThyssenKrupp's U.S. plant successful for generations to come."

The Authority plans to construct at Pinto Island a 20 ft by 1,000 ft freestanding marine terminal with barge handling capability located behind the ship berth. The terminal will be equipped with three wide-span gantry cranes, each having 125 ft of outreach and 150 ft of back reach. The cranes will be configured to unload product from ships to either barges staged between the ship dock and the sheet pile wall or direct to a storage area located behind the sheet pile wall. An integrated barge haul system will position barges under the cranes. The marine terminal, which will have a draft of 45 ft and will be capable of discharging 25,000 metric tons of semi-finished slabs from vessels and loading 10 barges per day, whether a vessel is in berth or not. Storage capacity will be provided to accommodate 150,000 metric tons of slabs.

James K. Lyons, Director and CEO for the Authority, noted, "We've been working with ThyssenKrupp's logistics team over the past several months on the best approach to building an efficient, technologically advanced terminal. We've settled on the overall concept, and now must begin the planning and construction process on what is currently estimated to be a $115 million terminal."

The terminal will employ state-of-the-art magnetic lifting gear designed by ThyssenKrupp, with assistance from ASPA. The lifting gear will lift 2.5 m x 12 m steel slabs from the hold of a Panamax vessel and place the slabs directly into barges or storage. The magnetic lifting gear will be affixed to the slab handling cranes, which will be designed by the Port Authority. The Authority also plans to utilize electronic technology to read unique identifiers on each slab handled, so as to provide up-to-date inventory records that clearly identify the cargo by individual identification numbers, location and weight. The terminal is expected to be completed 3 months prior to mill startup estimated for January 2010. The marine terminal is expected to add 50 to 60 permanent new jobs at the port when the terminal reaches full operating capacity.

The central element of ThyssenKrupp's new plant will be a hot strip mill with a capacity of up to 5.2 million metric tons per year. The proposed mill will process 3 million tons of slabs from the new ThyssenKrupp steel mill in Brazil to produce 4.1 million metric tons of flat carbon steel end products per year. Cold rolling and hot-dip coating capacities will also be installed for premium carbon steel end products.

In addition to the hot strip mill, ThyssenKrupp Stainless will build an electric steel plant with a capacity of up to 1 million metric tons of slabs per year, which will be rolled on the hot strip mill. A cold rolling facility is also planned which, in the first phase, will be designed to produce 350,000 tons of cold-rolled strip and 125,000 tons of pickled hot-rolled material. A further 340,000 tons of stainless hot-rolled produced on the hot strip mill will be supplied to the ThyssenKrupp Mexinox cold rolling facility in San Luis Potosí (Mexico).

Kentucky Riverports Improvement Project (KRIP)

For several years, the Kentucky riverports were under the jurisdiction of the Kentucky Port and River Development Commission that was part of the Cabinet for Economic Development. The Commission was abolished in 1992, and the Commonwealth's interest in ports was transferred to the Transportation Cabinet in 1998.

Many of the states, including Kentucky, that are served by riverports are prohibited by their constitutions from spending revenues derived from fuel taxes on any program except highways and bridges. This constitutional provision greatly limits the source of dedicated revenues to fund any programs for ports and waterways.

Ken Canter, President of the Kentucky Association of Riverports, discussed the Kentucky

Riverports Improvement Project (KRIP), at the National Waterways Conference on November 8, 2007.

Ken Canter, President, Kentucky Association of Riverports.

Objectives of the Kentucky Riverports Improvement Project (KRIP)

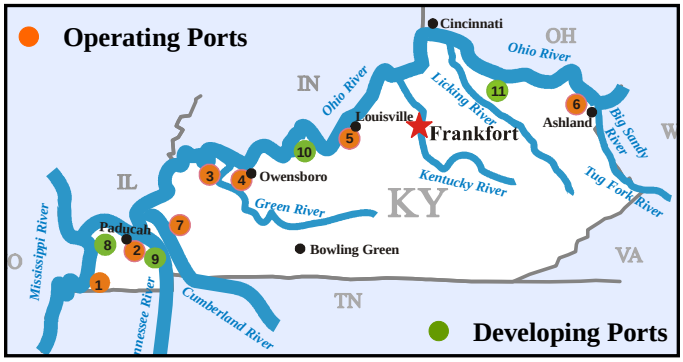
The KRIP was initiated in early 1997 by the Kentucky Transportation Cabinet (KYTC): (a) to conduct a study of the Commonwealth's riverports, and (b) to investigate the roles and responsibilities that other states have taken to capture the benefits of their inland waterway system. The objectives of KRIP are to:

- Accelerate growth of Kentucky ports.
- Identify new markets.
- Develop new, efficient, and economical operations.
- Identify infrastructure needs.
- Define roles for Kentucky state government.
- Develop state-level programs to enhance competitiveness of Kentucky Riverports.

KRIP Approach

The approach taken by KRIP was to interactively engage KYTC and the Kentucky Association of Riverports (KAR) members in a collaborative format. The purpose of these interactive meetings were (a) to learn what the ports want and need, (b) to determine what the State believes it can provide, and (c) find the proper match between these two beliefs.

KYTC contracted with Hanson Professional Services, Inc., to assess the current status of assistance to public river ports in Kentucky, evaluate those programs offered by other state governments in support of water transportation, and recommend a course of action for the Commonwealth. The real challenge comes in meeting the needs of existing mature operating ports and meeting the needs of emerging developing ports.



Kentucky's existing mature operating ports and merging developing ports along the Ohio River.

The study's recommendations provide a comprehensive and wide-reaching plan of action to enable Kentuckians to compete in regional, national, and global markets, and improve their quality of life by better utilization of the Commonwealth's water transportation assets, including its riverports.

KRIP Process

The process for studying the current status of assistance to public riverports in Kentucky consisted of a series of five 2-day meetings among Hanson, KAR, and KTYC. A typical day 1 of the series would consist of Hanson presenting new information during the day, with further discussion in an informal setting in the evening. Typical day 2 would consist of Hanson facilitating discussions and strategic thinking. Ideas and concerns were expressed by all, and the groups would work through important issues. Twenty one states with a role for ports were studied, and their level of assistance was determined.

	AL	AR	CA	FL	GA	IL	IN	KY	LA	MN	MS	MO	OH	OK	OR	PA	TN	TX	VA	WV	WI
State Owned	X				X		X				X								X	X	
Modal Advocacy		X												X							
Financial (Operations)												X			X						
Financial (Grants)				X					X	X	X	X			X						X
Financial (Loans)			X			X			(1)	X			(2)		X					X	
Technical Assistance								X		X						X	X			X	
Marketing											X	X			X						
Other											X		X		X			X			

Review of states roles for ports: (1) indicates authorized but not funded; (2) indicates loan program for intermodal projects, including ports.

KRIP Results

Recommendations from the KRIP analyses included: (a) Financial (there should be a $4 million grant program), (b) Marketing (there should be a $400 thousand grant program), and (c) Technical (there should be governance and organizational structure with water transportation staff).

In October 2007, the Kentucky Association of Riverports (KAR) met with top officials in the KYTC and the legislative director. In November 2007, KAR met with the Kentucky Economic Development Cabinet to discuss KRIP results. (Some items only needed Executive Action.) Draft legislation is underway for introduction in the January 2008 legislative session. Ports will be meeting with their State legislators.

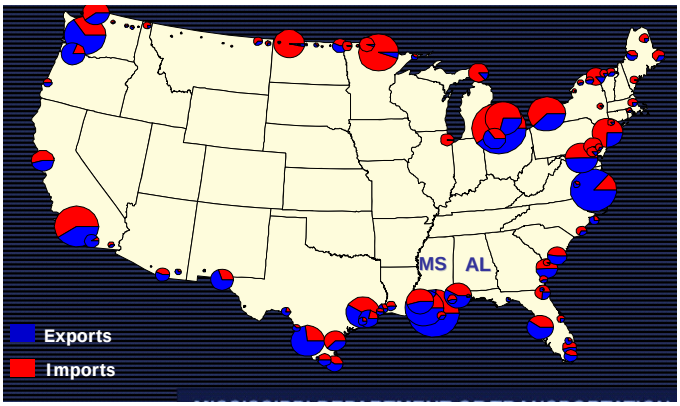
Conclusions

Kentucky Association of Riverports (KAR) has developed program recommendations through an interactive, collaborate process, learning from experiences of other states, and incorporating ideas from the Ports and the Kentucky Transportation Cabinet. KAR expects the program legislation will easily pass the Kentucky legislature and be signed into law by the Governor.

Local ports welcome and need State support.

Mississippi's Ports and Waterways: Competing in a Global Market Place

Mississippi is centrally located among major U.S. growth markets. The State is the gateway to all major U.S., Canadian, and Latin American markets. Mississippi is within a days drive of 55 percent of U.S. businesses and major population centers. Major air carriers serve the state with connections to principal cities throughout the world. The north-south railroads and interstate highways are ranked near the best in the nation. Just as importantly, Mississippi has two deepwater ports, five U.S. Customs ports of entry, and two foreign trade zones. The Gulf coast states of Louisiana, Mississippi, and Alabama constitute one of the top gateways for international freight.



Top gateways for international freight exports and imports.

Larry Brown, Executive Director, Mississippi Department of Transportation (MDOD), discussed promotional activities of the Office of Intermodal Planning Division of Freight, Rails, Ports, and Waterways, at the National Waterways Conference in November 2007. These activities arose because there was no clear and consistent description of the freight transportation system, its performance, and investment needs. There was insufficient public sector knowledge of freight transportation and supply chain management, and their importance to business and economic growth.

Larry Brown, Executive Director, Mississippi Department of Transportation.

Mississippi Public Ports

Mississippi has 16 public ports. The State controls two of these 16 ports. The remaining 14 ports are locally owned and operated. Mississippi's ports contribute about $1.4 billion to the State economy. This represents about 3 percent of the State gross product, and includes some 34,000 direct and indirect jobs paying about $765 million in salaries. Six of the ports are located along the Tennessee-Tombigbee waterway in the northeastern portion of the state. Six are located along the Mississippi River on the western side of the State. The remaining four are located along the Mississippi Gulf coast.

Public ports in the State of Mississippi.

Waterborne commerce has historically called at ports along the Gulf of Mexico and the Mississippi River. Water transportation delivers significant advantages when moving large quantities of bulk commodities over long distance. It is fuel efficient, and provides relief to highway traffic congestion. The inland ports primarily handle general and bulk cargo, while the Gulf coast ports handle containers and refrigerated products in addition to general and bulk cargo.

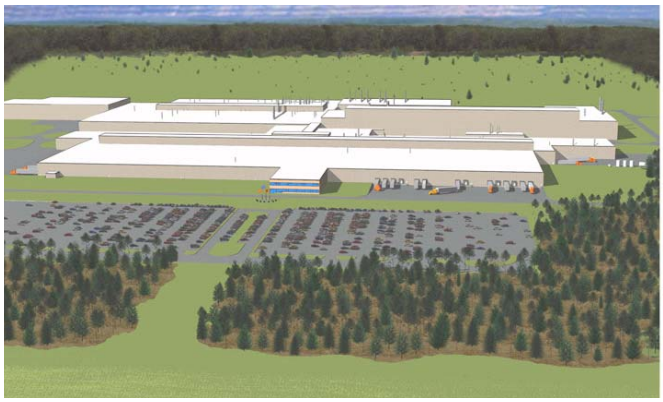
Barge bulk cargo movement along the Mississippi River.

The Port of Gulfport, however, handles imported fruit from the Caribbean, and South and Central American markets. Shippers seek out the fastest, most cost-effective means of handling their goods. Mississippi ports play an important role in the State's economy. Projections indicate that this role will continue, and in fact, strengthen. The State ports are developing the handling capability for the present and future levels of cargoes that move to and from Mississippi industry and consumers.

Global Mississippi

Because of its multimodal access of railroads, highways, ports, and waterways, Mississippi has become a region of great interest to some of the world's largest manufacturing industries.

Japan. The Japanese decided on Mississippi for a new Toyota plant despite heavy competition from other states. Toyota, poised to become the biggest car company in the world in 2008, built a $1.3 billion manufacturing plant near Tupelo, Mississippi, that will build 150,000 Highlander crossover utility vehicles annually when it opens in 2010. It will employ 2,000 factory workers.



Japanese Toyota factory located in Tupelo, Mississippi.

England. In 2006, Rolls-Royce broke ground for its new outdoor jet engine testing facility in southern Mississippi. It will spend $42 million on construction and upgrades, and will utilize existing infrastructure at the National Aeronautics and Space Administration's John C. Stennis Space Center. This is the first Rolls-Royce test facility of its kind outside the United Kingdom (UK), and the first built from the ground-up in the U.S. This relocates this testing capability from the UK to the U.S. There are only three such testing facilities in the world.

British Rolls-Royce jet engine test facility located in southern Mississippi.

Russia. SeverCorr is a steel company with a next-generation steel plant in Mississippi's Golden Triangle region of Columbus, Starkville, and West Point. It imports scrap metal from Pennsylvania, and has multimodal access with Class I and Class III railroads, U.S. highways, and Yellow Creek port access on the Tennessee-Tombigbee waterway. The plant can produce up to 1.43 millions tons of high-quality steel a year, and employs 450 people. On December 8, 2007, Russian steel maker Severstal announced it would buy the holding company for $84 million, acquiring an 80 percent controlling stake over SeverCorr.

Russian SeverCorr steel mill, Lowndes County, Mississippi.

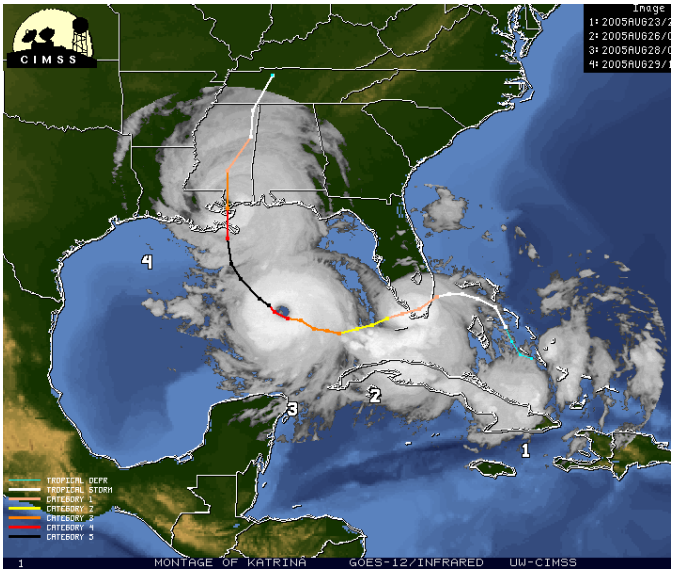
Mississippi's MULTIPLAN: The Future in Motion

MDOT made a deliberate and concerted effort to understand and recognize the importance of the State's port system to the economy. In 2000, the State commissioned a Comprehensive Assessment of the Ports of Mississippi. The final report of that assessment addressed (a) the physical attributes of each port, (b) the needs of each, (c) the domestic and international markets available at each, and (d) identified specific capital budget projects to be funded and brought to completion.

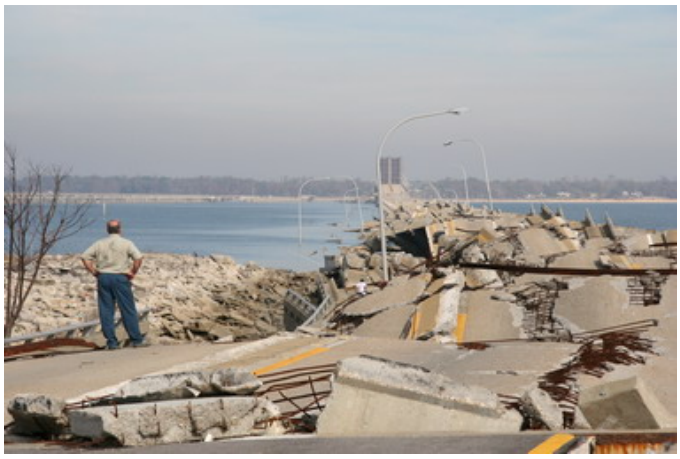
MULTIPLAN focused on the system-wide connectivity requirements to improve the movement of marine-related freight. MULTIPLAN reviewed all ports as an important element in the total freight logistics chain. Strategically, the individual ports must be viewed as only one part of the freight transportation system. Connectivity issues, including rail and truck access to the ports, are strategically critical to the success of the State's freight distribution system.

The ports of Mississippi are significantly important to the nation's maritime commerce. Over 500 million tons of cargo per year (nearly 20 percent of the total cargo tonnage in the U.S., both foreign and domestic) move through the ports of Mississippi. Historically, the ports in Mississippi and Louisiana have played a key role in the transport of products ranging from fuel oil to fresh fruit across the region and the nation.

Then, on August 28, 2005, Hurricane Katrina left a path of destruction across the U.S. Gulf coast, decimating the four Gulf coast ports of Mississippi. In the wake of this immense human tragedy, the re-establishment of major industries, ports, and shipping will be critical to the region's recovery.



Hurricane Katrina's path of destruction across the Louisiana/Mississippi/Alabama Gulf coast region of the United States.



A small sample of Hurricane Katrina's destruction along the Gulf coast.

Gulf Coast Port Recovery Time in Mississippi

Ports represent one of three major elements to the transportation system working together to allow goods movement. Three things are necessary for the Gulf coast ports in Mississippi (and Louisiana) to fully recover, including:

- The pathways must be open. Katrina affected waterways, roads, and rail routes that make up the freight transportation network.

- Facilities are necessary to transfer cargo from one mode (ship, truck, train) to another, linking the supply chain.

- Energy and labor must be available to move and transfer cargo among the modes.

At the Port of Gulfport, Mississippi, all structures on the Port property were severely damaged or destroyed beyond repair. The force of the wind and tidal surge destroyed all of the metal transit sheds and portions of the wharf structures and warehouse floors. At 28 ft of surge, the Port was completely submerged. Overall, the Port lost roughly half of its warehouse capacity, approximately 430,000 sq ft, including chilled warehouse space and blast freezers used for frozen chicken and banana cargoes.

Now, when traveling along the Gulf coast of the state of Mississippi, it is apparent that most of the hurricane debris has been removed, but tens of miles of vacant lots remain where homes and businesses existed prior to Katrina. If one were not aware of what had previously existed here, it would be easy to believe that normal conditions exist. But, the lots are vacant, the businesses are gone, and the people who operated the businesses are gone. Re-establishing the vibrant economy that previously existed here will be a long process, even with the best efforts of the people and State of Misisippi, the U.S. Federal Emergency Management Agency, and the U.S. Army Corps of Engineers.

In the longer term, full regional recovery, transportation delays, and higher prices for goods movement, will be governed by limited energy and labor available in this Gulf coast area of the United States.

Mark Your Calendar: Solutions to Coastal Disasters 2008 Conference

The American Society of Civil Engineers' Coasts, Oceans, Ports and Rivers Institute (COPRI) will hold the next **Solutions to Coastal Disasters 2008 Conference** from April 13-16, 2008, at Turtle Bay Resort on Oahu, Hawaii. The conference program will follow the format used during past conferences in San Diego, California, (2002) and Charleston, South Carolina (2005).

Solutions to Coastal Disasters 2008 Conference will build upon the information and discussions that developed from earlier conferences, and focus on both the lessons learned and the opportunities to best apply these lessons, to avoid or minimize preventable losses. The conference will provide opportunities for multi-disciplinary presentations, including lessons learned from the Indian Ocean tsunami, Hurricane Katrina, and concerns and opportunities developing from the fourth and most recent report of the Inter-governmental Panel on Climate Change. Recent disasters have revealed the vulnerabilities of coastal ecosystems and coastal communities, the interdependent nature of coastal systems, and the intense and conflicting pressures that define human use of dynamic coastal environments. **Solutions to Coastal Disasters 2008 Conference** will encourage greater examination of the ecosystem dynamics, vulnerability, and ways to incorporate social and ecological solutions into the discussion of coastal disasters.

Additional information about the conference, and on sponsorship and exhibit opportunities, can be found on the web site: *http://content.asce.org/conferences/cd2008/*.

Encourage New PIANC Members!

Please continue to encourage your friends and colleagues to join PIANC USA so they can start to receive all the benefits that PIANC has to offer! Refer them to *www.pianc.us* for a membership application.

PIANC USA Member Benefits

As a reminder, your PIANC USA membership entitles you to receive many outstanding benefits. We hope you are taking advantage of all of the following:

- **Quarterly Technical Magazine,** *On Course*, with technical articles and news from the navigation community.
- **Technical Reports** in the field of inland maritime and recreational navigation, including environmental issues.
- Quarterly electronic **PIANC USA Newsletter**, *Bulletin*, with news and articles related to navigation and PIANC news in the United States.
- PIANC **International Electronic Newsletter,** *Sailing Ahead*, with international news updates for the navigation community.
- Complimentary or reduced registrations to **Conferences** such as the PIANC Annual General Assembly and World Congress, PIANC USA Annual Meeting, Ports Conference, SMART RIVERS, PIANC USA-COPEDEC Conference on Coastal and Port Engineering in countries in transition, etc.
- PIANC **Membership Directory**, an international network of like-minded professionals.
- Opportunity to develop "cutting edge" advancements in your profession by serving on **Technical International Working Groups**.
- **Networking Events** to strengthen your professional connections and business opportunities worldwide.
- **Professional Recognition** with awards such as the De Paepe-Willems Award, Jack Nichol Marina Design Award, and the PIANC USA Scholarship.
- **Young Professional** activities for students and professionals under age 40.

Upcoming Related Conferences

2008

- ***Green Port/ECO Ports.*** February 27-28, Amsterdam, The Netherlands.
- ***Inland Waterways Navigation Conference.*** March 3-7, St. Louis Missouri.
- ***Solutions to Coastal Disasters 2008 Conference.*** April 13-16, Turtle Bay Resort, Oahu, Hawaii.
- ***Coastal Zone Canada.*** May 25-29, Vancouver, British Columbia, Canada.
- ***Western Dredging Association (WEDA) XXVIII, and Texas A&M University 39th Annual Dredging Seminar.*** June 8-11, St. Louis, Missouri.
- ***31st International Conference on Coastal Engineering.*** August 31 - September 5, Hamburg, Germany.
- ***World Canals Conference 2008.*** September 15-17, Kingston, Ontario, Canada.
- ***Gulf Coast Hurricane Preparedness, Response, Recovery and Rebuilding.*** Early November, Mobile, Alabama.

PIANC USA Dues

PIANC USA 2008 membership fees are as follows:

- Individual member: $120
- Student member: $40

- Small corporate member: $600
- Large corporate member: $1,150

PIANC USA dues enables us to continue to meet our international commitment as well as to expand and re-energize our current programs and fund new initiatives. At PIANC USA, we are dedicated to being good stewards of our resources and we stretch every penny to make sure that your investment in our organization is being put to the best use. We thank you for your continued membership and support, and we look forward to working with you in 2008.

About PIANC

What is PIANC? The International Navigation Association (PIANC) is a worldwide organization of individuals, corporations, and national governments. Founded in 1885 in Brussels, Belgium, it is concerned with maritime ports and inland waterways. The Association promotes contact and advances and disseminates information of a technical, economic, and environmental nature between people worldwide in order to efficiently manage, develop, sustain, and enhance inland, coastal and ocean waterways, ports and harbors, and their infrastructure, in a changing environment.

Where is PIANC? The international headquarters is located in Brussels, Belgium, at facilities provided by the Belgian Government. The headquarters of the United States Section is located in the Washington, DC area, within facilities provided by the U.S. Army Corps of Engineers.

International Interaction. The Annual General Assembly operates through a Council, which directs the working level permanent technical committees, international study commissions, and working groups.

Working Groups. Technical working groups are composed of participants from member countries who have interest in various subjects being studied. The groups gather, analyze, and consolidate state-of-the-art material from each country. The resulting reports are published and sent to each PIANC member. Working group reports and the International Bulletin are sent to each member from Brussels.

Every 4 years an International Congress, open to all members and other registrants, is held for the presentation and discussion of papers on subjects pertaining to waterways and maritime navigation.

PIANC also participates in technical activities with other organizations to study navigation problems and joins with them to present symposia on related subjects.

In the USA. The United States became a member of PIANC by Act of Congress in 1902. The Chairman of PIANC USA is the Assistant Secretary of the Army (Civil Works). The Director of Civil Works for the U.S. Army Corps of Engineers serves as President. A National Commission of 11 individuals, which represent both private industry and the Federal Government, manages PIANC USA. PIANC USA has two standing and four technical committees, which promote the flow of information between members and facilitate cooperation with other national organizations. The committees are Membership, Publications, Environment, Inland Navigation, Maritime Navigation, and Ports and Recreation Navigation.

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Anne Sudar Cann
Secretary
Institute for Water Resources, USACE

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PIANC USA
7701 Telegraph Road
Alexandria, VA 2315-3868

Anne Sudar Cann
Secretary
r.anne.sudar@usace.army.mil

Edmond J. Russo, Jr., P.E.
Chairman, Publications Committee, and
Editor, PIANC USA Bulletin
edmond.j.russo@usace.army.mil